

manual of otology. To the present edition Dr. Bacon has added a number of new illustrations and a concise but excellent account of the operation of tonsillectomy and the submucous resection of the nasal septum. This edition, like each of the previous editions, shows every evidence of careful revision of the text on the part of the author. Every subject is brought thoroughly up to date. No better book could be recommended to the student or practitioner who wishes an authoritative presentation of the subject of otology. F. R. P.

ILLUSTRATIONS OF THE GROSS MORBID ANATOMY OF THE BRAIN IN THE INSANE. A SELECTION OF SEVENTY-FIVE PLATES SHOWING THE PATHOLOGICAL CONDITIONS FOUND IN POSTMORTEM EXAMINATIONS OF THE BRAIN IN MENTAL DISEASE. By I. W. BLACKBURN, M.D., Pathologist to the Government Hospital for the Insane, Washington, D. C.; Professor of Morbid Anatomy in the Medical Department of the University of Georgetown, and in the Department of Medicine of the George Washington University, Washington, D. C. Pp 154; 75 plates. Washington: Government Printing Office, 1908.

OUR knowledge of the gross morbid anatomy of the brain in the insane is by no means as complete as it should be, and Dr. Blackburn has done a real service in presenting this work, in which there are 75 excellent plates. The technical difficulties in preparing the photographs for such a work as this are many, and the author is to be congratulated for the excellent results obtained. No one who has not worked in neuropathology can appreciate the many difficulties which beset the preparation of brains for such a work as this, and it is indeed a pleasure to commend the good results obtained.

The collection of pathological specimens from which the photographs were made were selected from among 2350 autopsies, and the author has endeavored to give examples of most of the common changes in the adult insane. He has followed a pathological classification rather than a clinical one, and the specimens include brains from general arteriosclerosis with or without cerebral softening, hemorrhages, atrophy of the brain, meningo-encephalitis or paresis, hydrocephalic states, meningeal conditions, and brain tumors. As the author states, it is of course understood that the lesions represented in no sense are to be considered as showing the essential morbid anatomy of any form of mental disease except general paralysis and possibly senile dementia and arteriosclerotic dementia. In many instances the lesions were purely accidental and had nothing to do with the form of insanity. Opposite each plate is a brief statement of the name, age, and clinical diagnosis, with a more extended, but brief, discussion of the lesions.

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PROGRESS
OF
MEDICAL SCIENCE.

MEDICINE.

UNDER THE CHARGE OF
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Acute Addison's Disease.—STRAUB (*Deut. Arch. f. klin. Med.*, 1909, xcvi, 67) reports a case of Addison's disease, which is of importance as throwing light on the time relation between the onset of the pathological process in the adrenals and the beginning of clinical symptoms. This is the most acute case yet reported, the duration of the disease being only seventeen days. The onset was marked by severe abdominal pain and vomiting. There was, at times, watery diarrhoea. Ten days later reddish discoloration of the skin appeared over various points of pressure. These later assumed a more brown color. There was no pigmentation of the mucous membranes. The blood pressure remained 105 mm. Hg., until the day of the death, when it fell to 99 mm. The clinical diagnosis was malignant tumor of the lungs, pyloric stenosis, and tumor in the right lumbar region. The symptoms, pigmentation, asthenia, psychological disturbance, and sudden death also suggested Addison's disease. Autopsy showed scirrhous carcinoma of the pylorus with multiple metastases. Both adrenal glands were involved, but only to a very moderate degree. The most striking lesion of the adrenals was a general venous thrombosis, the apparent age of which corresponded well with the duration of the symptoms. Straub believes that the obstruction to venous outflow was the etiological factor in the case.

[There are a number of cases in literature in which destructive processes in the suprarenal capsules have resulted fatally, and in a considerably shorter period of time with symptoms closely similar to those described in this case. Indeed, a syndrome consisting particularly of sudden abdominal pain, vomiting, diarrhoea, tachycardia, asthenia, psychological disturbances, hypothermia, collapse, often similar to that

observed in peritonitis, and sudden death, has been described by Sargent and Bernard (*Compt. rend. soc. de biol.*, Paris, 1898, 24 sec.; *L'insuffisance surrénale*, Par., Masson, 1903, Collection Léauté), as characteristic of acute insufficiency of the adrenals. In the works referred to a number of interesting illustrative cases may be found. The striking feature in this case appears to be the rapid appearance of the pigmentation which, however, does not seem to have been especially characteristic.—W. S. T.]

Two New Tests for Albumin in the Urine.—OGURO (*Zeit. f. exp. Path. u. Therap.*, 1909, vii, 349) presents two new qualitative tests for albumin in the urine. Were it not for the fact that his tests are apparently specific as well as simple, he would hesitate to add to the already long list. Test I, with tincture of iodine and sodium bisulphate. Method of application: A few cubic centimeters (5 to 6) of the urine—which must, of course, be clear—is placed in a test-tube and acidified with a few drops of dilute acetic acid. About $\frac{1}{2}$ volume of tincture of iodine (10 per cent.) is now added, and the whole is well shaken. A dirty, dark brown precipitate results. A saturated solution (watery) of sodium bisulphate is next added drop by drop, shaking constantly, until the brownish fluid is decolorized. If the urine contains albumin, one sees a permanent whitish cloud or flocculent precipitate. If no albumin is present, the fluid remains clear after the addition of the sodium bisulphate, and shows only the original urinary color. With minimal quantities of albumin, the reaction becomes more evident on standing a few minutes. Test II, with decolorized tincture of iodine. Method of application: One decolorizes tincture of iodine with saturated watery solution of sodium bisulphate and filters. The filtrate is a clear, rather yellow fluid, which keeps well. On standing for some time, small, yellow crystals may be precipitated, without injury to the reagent. The urine, as in Test I, is acidified with dilute acetic acid. About $\frac{1}{2}$ volume of the reagent is added and the whole well shaken. If albumin is present, a cloud or a flocculent white precipitate forms. With traces of albumin the reaction may be delayed a few minutes. Normal urine never shows a cloud with these tests. For control Oguro has always employed the Heller-Spiegler heat, and the sulphosalicylic acid tests. In two years Oguro has never found a urine in which salts, alkaloids, or other non-albuminous substances led to confusion. The tests are sensitive to albumin in a dilution of 1 to 120,000.

Abdominal Palpatory Albuminuria.—SCHREIBER (*Deut. Archiv f. klin. Med.*, 1909, xcix, 1) has made an elaborate study of albuminuria resulting from certain manipulations in abdominal palpation, in which the aorta both above and below the renal arteries has been compressed and the effect of pressure on the vena cava has been noted. He finds, by the aid of measurements from bony landmarks and of skiagrams, that the renal vessels may be localized with great precision. Spontaneous albuminuria from abdominal palpation is very seldom seen. It certainly is not due to compression of the vena cava, but may easily arise from compression of certain parts of the aorta. Compress-

sion of the aorta at the point where the renal arteries are given off is easily accomplished in suitable cases and always leads to albuminuria. It is seldom the case that one can palpate the aorta above the origin of the renal arteries, but when possible, pressure here also causes albuminuria. In either case the albuminuria is more marked and persistent the more complete the compression and the longer it is maintained. Even an incomplete arterial compression of a few seconds may suffice to produce albuminuria. Arterial albuminurias appear quickly from slight changes in the aortic pressure and are generally of high albumin content. Pressure exerted on the aorta below the renal arteries causes no change in the urine. Compression of the vena cava above the renal veins leads to the development of albuminuria much more slowly, and the albumin appears in relatively small amount.

The Staining of Moist Preparations with Azure-eosin (Giemsa).—GIEMSA (*Deut. med. Woch.*, 1909, xxxv, 1751) has contributed a new staining method which should prove of special interest to those interested in tropical medicine. It is intended for the staining of moist smears and fresh tissue by means of his azure-eosin mixture, which gives the characteristic Romanowsky staining. The details of the method are as follows: (1) Fix the smears while still moist or the tissue in sublimate alcohol. (Concentrated watery $HgCl_2$, 2 parts; absolute alcohol, 1 part.) The cover glass is placed in the solution before it dries, with the specimen side down; later it is turned over. Fixation requires twelve to fourteen hours. (2) Wash quickly in water and then five to ten minutes in a solution of KI, 2 gm.; Lugol's solution, 3 c.c.; and distilled water, 100 c.c. (3) Wash in water very quickly and place in a 0.5 per cent. aqueous solution of sodium thiosulphate, by which the yellow staining of the iodine solution is completely removed. (4) Place in flowing water five minutes. (5) Stain with freshly prepared Giemsa solution one to twelve hours. After the first half hour the stain should be renewed. (6) Wash in water and carry through the following: (a) Acetone; 95 c.c.; xylol 5 c.c.; (b) acetone, 70 c.c.; xylol, 30 c.c.; (c) acetone, 30 c.c.; xylol, 70 c.c.; (d) xylol, pure. (7) Embed in cedar oil. The time in solutions (a), (b), and (c) depends on the differentiation desired. The method is especially valuable in the study of protozoa, such as malaria, infusoria, trypanosomes spirochetes, etc. Beautiful results are also obtained with tissue.

A Muscle Bundle Between the Superior Vena Cava and the His Bundle.—THOREL (*Munch. med. Woch.*, 1909, lvi, 2159) reports findings which will be of considerable importance in the physiology and pathology of the heart. By making serial sections and reconstructing a model, he has demonstrated, in two adult human hearts studied, that there is a continuous bundle of muscle connecting the superior vena cava with both the Keith-Flack nucleus and the Aschoff-Tawara nucleus. This bundle is readily distinguishable histologically, consisting of Purkinje cells. A detailed account will appear soon.

The Excretion of Uric Acid Injected Intramuscularly in Gouty Subjects.—Brugsch and Schittenhelm have given uric acid and purin bases to